GenCore version Copyright (c) 1993 - 2003

- protein search, using sw model

OM protein

Run on:

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Propionibacterium
Breast cancer - CA
Novel human CASB74
Human CASB7439 pro
                                                                                                                                                            Peptide transport
Protein transducti
Heparin binding pe
Heparin binding pe
Peptide Bis-Arg He
Heparin binding pe
Heparin binding pe
H. influenzae Hap
Fragment of human
Propionibacterium
                                                                                                             Transduction prote
Synthetic transduc
Amino acid sequenc
Human immunodefici
                                                                                                                                                                                                                                                                                                             Human lung tumour
L801P lung tumour
Human lung cancer-
Lung cancer therap
Human ORFX ORF2230
                                                                          Propionibacterium
Novel human CASB74
Propionibacterium
                                                                                                                                                                                                                                                                                                      human secret
                                                                                                                                                                                                                                                                                                                                                                           DITHP polype
                                                                                                                                                                                                                                                                                                                                                                                                                          Fragment of human
Human ORFX ORF2144
                                                                                                                                                                                                                                                                                                                                                                                         Human ovarian anti
                                                                                                                                                                                                                                                                                      Zea mays protein
Novel human secre
                                                                                                                                                                                                                                                                                                                                                                                                     Zea mays protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Ala is modified by unidentified R1 group"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sepsis; branched chain peptide; antibacterial; immunosuppressive; endotoxin; helix peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                Novel
                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.
                                                            AAE33614
AAU49513
AAU10339
                                                                                                                                                                        ABP56078
AAW41503
AAY1429
AAW41506
AAW41506
AAY87839
ABU07934
                                                                                                                                                                                                                                                                                                AAU30650
AAB76872
                                                                                                                                                                                                                                                                                                                        AAU85527
ABU69499
ABU66401
                                                                                                 AAU51578
AAY25078
                                                                                                                                                             AAU76085
                                      ABJ10474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide Tris-Arg Helix #3 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB71430 standard; peptide; 16 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wolz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
Wolz RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-659478/71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB71430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
  Peptide Tris-Arg H
Heparin binding pe
Peptide Bis-Arg He
Peptide Arg Helix
Heparin binding pe
M. tuberculosis an
M. tuberculosis ar
M. tuberculosis an
M. tuberculosis an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                             August 9, 2003, 16:11:13 ; Search time 45.2571 Seconds (without alignments) 56.115 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                             /SIDSI/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
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/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1996.
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/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1995
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                                                                                                                                                                                                                                                                       1107863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /SIDS1/gcgdata/geneseq/geneseqp-embl/AA199
          5.1.6
Compugen Ltd.
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Total number of hits satisfying chosen parameters:

0

Word size :

Searched:

Post-processing: Listing first 45 summaries

Database :

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

1107863 segs, 158726573 residues

OLIGO Gapop 60.0 , Gapext 60.0 ARRAARAARRARAEA 16

Scoring table:

US-09-905-691-4 16

Title: Perfect score:

Sequence:

/SIDS1/gcgdata/geneseq/genesec//SIDS1/gcgdata/geneseq/genesec

SUMMARIES

H

80

Length

Query Match

Score

Result ŝ AAY87840 AAB71428 AAB71432 AAY87834 AAY39179 AAY39036 ABU05688

232223323

4506789

Use of cationic helix peptides for treatment of sepsis and for the detection and removal of endotoxins

Disclosure; Fig 18; 18pp; English.

This invention describes a novel use of antibacterial and immunosuppressive peptides designated Arg Helix 2. Bis Arg Helix 2, retra-Arg Helix 2 or Tris-Arg Helix 3 for the manufacture of a medicament for the treatment of sepsis and the detection and removal of endotoxins. The peptides of the invention are used in a method for detecting conduction and removal of endotoxins. The peptides of the invention are used in a method for detecting the sample with a labelled helix peptide and then detecting the presence of any labelled molecule bound to endotoxin. The peptides can also be used in a method for removing endotoxin in a sample which comprises exposing the sample to a helix peptide, bound to a solid support, then collecting the sample to a condocoxin removal may be in vivo, or the peptides may be used to form an affinity trap for endotoxins in e.g. dialysis-type treatments, or for removal of endotoxins from plasma fractionation products. They are also used as model frameworks for endotoxin binding from which new analogues may be designed. This sequence repeasents the peptide Arg Helix #3 which provide designed the construction of Tris-Arg Helix #3, a branched chain peptide described in the method of the invention.

16 AA; Sequence

Gaps ö Score 16; DB 23; Length 16; Pred. No. 1.2e-07; Mismatches 0; Indels ö Query Match
Best Local Similarity 100.0%;
Matches 16; Conservative 0 Query Match

1 ARRAARAARRAEA 16

윱 à

AAY87840 standard; peptide; 19 AA. AAY87840;

01-SEP-2000 (first entry)

Heparin binding peptide Bis-Arg helix #2.

Heparin binding peptide; antagonist; cardiovascular; coagulant; bleeding wound; vascular anastomoses; leaking prosthetic vascular graft; bleeding wound; vascular anastom protamine substitute; treatment

Synthetic.

EP999219-A2

10-MAY-2000

99EP-0119514 01-0CT-1999; 06-OCT-1998;

(COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.

Sobel M; Harris RB,

WPI; 2000-306006/27.

New heparin binding molecules, useful for reducing heparin content in mammal by reducing the anticoagulant effects of heparin -

Example 1; Fig la; 39pp; English.

This invention describes novel heparin binding molecules (I). The molecules (I) are useful as heparin antagonist drugs for cardiovascular application and specifically neutralize heparin's conventional 

anticoagulant properties. (I) are also useful for counteracting actions of heparin locally e.g. in bleeding wounds, vascular anastomoses or leaking prosthetic vascular grafts. (I) is also useful combined in a pharmaceutical composition with insulin, as a substitute for protamine for use in treating diabetics. The heparin binding molecules (I) specifically neutralize heparin's conventional anticoagulant properties without causing deleterious hemodynamic side-effects or exacerbation of the proliferative vascular response to injury. (I) are short-duration, intravenous drugs to be used in elective or emergency situations which can safely and specifically neutralize heparin's proliferative response to injury. This sequence represents a heparin's proliferative response in the method of the invention. 8888888888888888888

19 AA; Sequence

Gaps ö Length 19; 0; Indels 100.0%; Score 16; DB 21; 100.0%; Pred. No. 1.4e-07; ive 0; Mismatches 0; Local Similarity 100. hes 15; Conservative Query Match Matches

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1 ARRAARAAARRARAEA 16

ð 셤 RESULT 3

AAB71428 standard; peptide; 19 AA.

AAB71428;

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(first entry) 27-NOV-2002 

Peptide Bis-Arg Helix #2 fragment #1.

Sepsis; branched chain peptide; antibacterial; immunosuppressive; endotoxin; helix peptide.

Synthetic.

Location/Qualifiers

/note- "Ala is modified by unidentified R1 group" Key Modifled-site

EP1232754-A2

21-AUG-2002.

14-FEB-2002; 2002EP-0251027

14-FEB-2001; 2001US-268410P

(COMM-) COMMONWEALTH BIOTECHNOLOGIES INC.

ö 4PI; 2002-659478/71. Harris RB,

Use of cationic helix peptides for treatment of sepsis and for the detection and removal of endotoxins

Disclosure; Fig 1A; 18pp; English.

This invention describes a novel use of antibacterial and immunosuppressive peptides designated Arg Helix 2, Bis Arg Helix 2, Tetra-Arg Helix 3 for the manufacture of a medicament for the treatment of sepsis and the detection and removal of endotoxins. The peptides of the invention are used in a method for detecting endotoxin in a sample comprising contacting the sample with a labelled helix peptide and then detecting the presence of any labelled molecule bound to endotoxin. The peptides can also be used in a method for removing endotoxin in a sample which comprises exposing the sample to a helix peptide, bound to a solid support, then collecting the sample. The endotoxin removal may be in vivo, or the peptides may be used to form an ö

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Gaps

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Indels

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affinity trap for endotoxins in e.g. dialysis-type treatments, or for removal of endotoxins from plasma fractionation products. They are also used as model frameworks for endotoxin binding from which new analogues may be designed. This sequence represents the peptide Arg Helix #2 which is used in the construction of Bis Arg Helix #2, a branched chain peptide described in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel use of antibacterial and immunosuppressive peptides designated Arg Helix 2, Bis Arg Helix 2, Petra-Arg Helix 2 or Tris-Arg Helix 3 for the manufacture of a medicament for the treatment of sepsis and the detection and removal of endotoxins. The peptides of the invention are used in a method for detecting and topic and the detecting the sample with a labelled helix peptide and then detecting the presence of any labelled molecule bound to endotoxin. The peptides can also be used in a method for removing endotoxin. The peptides can also be used in a method for removing endotoxin in a sample which comprises exposing the sample to a helix peptide, bound to a solid support, then collecting the sample. The endotoxin removal may be in vivo, or the peptides may be used to for a sfinity trap for endotoxins in e.g. dialysis-type treatments, or for removal of endotoxins from plasma fractionation products. They are also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C(O)-NepsilonH-(CH2)3-Tris-ArgHel#3, where
the Tris-ArgHel#3 is represented in AAB71431"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Use of cationic helix peptides for treatment of sepsis and for the detection and removal of endotoxins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sepsis; branched chain peptide; antibacterial; immunosuppressive; endotoxin; helix peptide.
                                                                                                                                                                    Score 16; DB 23; Length 19; Pred. No. 1.4e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide Arg Helix #3 for construction of Tris-Arg helix #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note- "This residue has a side chain
                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
/note- "Acylated residue"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                      AAB71432 standard; peptide; 15 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 2; 18pp; English.
                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wolz G;
                                                                                                                                                                                                                                                              1 ARRAARAAARRARAEA 16
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                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wolz RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-659478/71.
                                                                                                                                                                                    Local Similarity
nes 16; Conserv
                                                                                                                                19 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                Sequence
                                                                                                                                                                  Query Match
                                                                                                                                                                                                       Matches
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may be dealgned. This sequence represents the peptide Arg Helix #3 which is used in the construction of the branched chain peptide Tris-Arg Helix #3 described in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                             Heparin binding peptide; antagonist; cardiovascular; coagulant;
bleeding wound; vascular anastomoses; leaking prosthetic vascular graft;
protamine substitute; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          molecules (I) are useful as heparin antagonist drugs for cardiovascular application and specifically neutralize heparin's conventional anticogulant properties. (I) are also useful for counteracting actions of heparin locally e.g. in bleeding wounds, vascular anastomoses or leaking prosthetic vascular grafts. (I) is also useful combined in a pharmaceutical composition with insulin, as a substitute for protamine for use in treating diabetics. The heparin binding molecules (I) specifically neutralize heparin's conventional anticoagulant properties without causing deleterious hemodynamic side-effects or exacerbation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New heparin binding molecules, useful for reducing heparin content in a mammal by reducing the anticoagulant effects of heparin -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          intravenous drugs to be used in elective or emergency situations which can safely and specifically neutralize heparin's proliferative response to injury. This sequence represents a heparin-binding peptide described
 new analogues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the proliferative vascular response to injury. (I) are short-duration,
                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                Length 15;
used as model frameworks for endotoxin binding from which
                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
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                                                                                                                                                 ö
                                                                                                              93.8%; Score 15; DB 23; 100.0%; Pred. No. 8.5e-07;
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. 0.15;
                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 0.1
Mismatches
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100.0%; Pred. NC
Live 0; Mismat
                                                                                                                                                                                                                                                                                                                                                                                            Heparin binding peptide Arg helix #1
                                                                                                                                                                                                                                                                                  '834
AAY87834 standard; peptide; 19 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 7; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99EP-0119514.
                                                                                                                                                                               2 RRAARAARRARAEA 16
                                                                                                                                                                                                  (first entry)
                                                                                                                            Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 56.2
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-306006/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Harris RB, Sobel M;
                                                                                15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                           Reparin binding
                                                                                                                                                                                                                                                                                                                                                             01-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-1998;
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                                                                                Sequence
                                                                                                              Query Match
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                                                                                                                                 Best Loc
Matches
                                                                                                                                                                                                                                                              RESULT 5
                                                                                                                                                                                                                                                                           AAY87834
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8888838
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AAY39179;

RESULT 6 AAX3917

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This invention describes novel recombinant antigens and their encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acids derived from Mycobacterium tuberculosis. The novel polypeptides are useful for detecting M. tuberculosis infection in a biological sample by detecting antibodies which bind with the polypeptides, and are useful as vaccines for immunizing against M. tuberculosis infection. The new detection methods are needed as current vaccination strategies do not provide 100% immunity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mycobacterioses; survival; virulence; protective antigen; vaccine;
                                                                            Antigen; diagnosis; detection; infection; antibody; immunisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polypeptide comprising antigenic portions of M. tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Houghton R;

    tuberculosis and M. leprae marker protein #339.

                            M. tuberculosis recombinant antigen protein MO-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Campos-Neto A, Dillon DC, Hendrickson RC, Hc
Lodes MJ, Reed SG, Skeiky YAW, Twardzik DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nycobacterial disease; tuberculosis; leprosy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 9; DB 20; Pred. No. 0.510; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; Page 259; 323pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABU05688 standard; Protein; 105 AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56.2%; Scor
100.0%; Pre
0;
                                                                                                                                                                                                                                                                                                            99WO-US03265
                                                                                                                                                                                                                                                                                                                                                              98US-0072596.
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                                                                                                                                                        Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacterium tuberculosis, Mycobacterium leprae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
9, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 AAARRARAE 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CORI-), CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-527416/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40200274903-A2.
                                                                                                                                                                                                          WO9942118-A2.
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18-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABU05688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes polypeptides comprising an immunogenic part of a Mycobacterium tuberculosis antigen (Ag). Also described are vaccines and fusion protein containing M. tuberculosis Ag's. M. tuberculosis Ag's, DNAs encoding them, derived fusion proteins and other polypeptides fragments, can be used in pharmaceutical compositions or vaccines to generate a protective or therapeutic immune response to tuberculosis and as reagents in skin tests for disgnosis of tuberculosis. Ag can induce proliferation of, or cytokine secretion by, T, B or natural killer cells and/or macrophages in tuberculosis-immune subjects. Aazi9249 to Aazi9460 and AAY39083 to AAX39225 are used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antigens from Mycobacterium tuberculosis useful in diagnostic skin tests and protective or therapeutic vaccines or compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                             Mycobacterium tuberculosis; M. tuberculosis; antigen; immu
immunotherapy; diagnosis; immunisation; vaccine; infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Campos-Neto A, Dillon DC, Hendrickson RC, Houghton R;
Lodes MJ, Reed SG, Skelky YAW, Twardzik DR, Vedvick
                                                                                                                                                                                                                                                                                                                         M. tuberculosis antigen 5' MO-4 amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   56.2%; Score 9; DB 20; 100.0%; Pred. No. 0.51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 5; Page 214; 299pp; English.
                                                                                                                                                                     AAY39179 standard; Protein; 92 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0072967
                                                                                                                                                                                                                                                                                                                                                                                                                                  Immune response; skin test.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                            (first entry)
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                                            4 AARAAARRA 12
AARAAARRA 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 AAARRARAE 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-527409/44.
N-PSDB; AAZ19371.
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                                                                                                                                                                                                                                                                         05-NOV-1999
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18-FEB-1998;
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Gaps

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(INSP ) INST PASTEUR

05-NOV-1999 (first entry)

AAX39036;

RESULT 7
AAY39036
ID AAY3
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AC AAY3
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DT 05-N

Seguence Query Match

Matches

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Length 92; 0; Indels ô

Gaps

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New antigens from Mycobacterium tuberculosis useful in diagnostic skin tests and protective or therapeutic vaccines or compositions
                                                                                                                                                                                                                                                                                                                                            M. tuberculosis antigen 5' MO-34 amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campos-Neto A, Dillon DC, Hendrickson RC, Ho
Lodes MJ, Reed SG, Skeiky YAW, Twardzik DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; Page 217-218; 299pp; English.
                                                           Claim 17; Page 536; 874pp; English.
                                                                                                                                                                                                                                                                                                AAY39186 standard; Protein; 160 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US03268
                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0072967
98US-0025197
                                                                                                                                                                                                                                                                                                                                                                                            Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                    Local Similarity 100.
                                                                                                                                                                                                                                          7 AAARRARAE 15
                                                                                                                                                                                                                                                     11111111
19 AAARRARAE 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-527409/44.
N-PSDB; AAZ19378.
              WPI; 2002-759885/82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CORI-) CORIXA CORP.
                                                                                                                                                                                             Sequence 105 AA;
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Cole S;
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Matches
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The present invention describes polypeptides comprising an immunogenic part of a Mycobacterium tuberculosis antigen (Ag). Also described are vaccines and fusion protein containing M. tuberculosis Ag's.
M. tuberculosis Ag's. DNAs encoding them, derived fusion proteins and other polypeptides fragments, can be used in pharmaceutical compositions or vaccines to generate a protective or therapeutic immune response to tuberculosis and as reagents in skin tests for diagnosis of tuberculosis, ag can induce proliferation of, or cytokine secretion by, T, B or natural killer cells and/or macrophages in tuberculosis-immune subjects. AAZ19249 to AAZ19460 and AAY39083 to AAX39225 are used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel recombinant antigens and their encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acids derived from Mycobacterium tuberculosis. The novel polypeptides are useful for detecting M. tuberculosis infection in biological sample by detecting antibodies which bind with the polypeptides, and are useful as vaccines for immunizing against M. tuberculosis infection. The new detection methods are needed as current vaccination strategies do not provide 100% immunity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antigen; diagnosis; detection; infection; antibody; immunisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide comprising antigenic portions of M. tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Houghton R;
                                                                                                                                                                                                                                                                                                                                        DB 20; Length 160; . 0.79;
                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           M. tuberculosis recombinant antigen protein MO-34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campos-Neto A, Dillon DC, Hendrickson RC, Ho
Lodes MJ, Reed SG, Skeiky YAW, Twardzik DR,
                                                                                                                                                                                                                                                                                                                                                    100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                               unery Match
Best Local Similarity 100.0%; Pred. No
Matches 9; W Conservative 0; Mismat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY39043 standard; Protein; 160 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacterium tuberculosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         31 AAARRARAE 39
                                                                                                                                                                                                                                                                                                                                                                                                                             7 AAARRARAE 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-527416/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccine; immunity.
                                                                                                                                                                                                                                                                                           160 AA;
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18-FEB-1998;
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                                                                                                                                                                                                                                                                                           Sequence
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AAY39043
ID AAY3
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                                                                                                                                                                                                                              for survival or virulence of miyobacteria species. The method comprises aligning the genomic sequence of a first mycobacterium species on a aligning the genomic sequence of a first mycobacterium species on a polymorlectide sequence of a second mycobacterium species and selecting a polymorlectide sequence that is highly conserved in both genomes with no counterparts in other bacterial genomic sequences and that corresponds to an essential gene for the survival or virulence of mycobacterium species. The method of the invention is useful for detecting the potential new targets and protection. The method reduces the number of potential new targets and protective antigens for new drugs and vaccine compositions to treat and prevent mycobacterial diseases, particularly protein from Mycobacterium tuberculosis and Mycobacterium tuberculosis and Mycobacterium tuberculosis and Mycobacterium there invention.
                                                                                                                                                                                                            This invention relates to a novel method for identifying essential genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                           Identifying and selecting genes for survival or virulence of mycobacteria by a comparative genomic analysis of the sequences of Mycobacterium tuberculosis and M. leprae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mycobacterium tuberculosis; M. tuberculosis; antigen; immunogen; immunotherapy; diagnosis; immunisation; vaccine; infection; immune response; skin test.
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0; Mismatches
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Gaps

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Indels

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DB 20;

Query Match
56.2%; Score 9; DB 2
Best Local Similarity 100.0%; Pred. No. 0.7
Matches 9; Conservative 0; Mismatches

Sequence

osteomyelitis;

SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;

dermatological; osteopathic; neuroprotectant

Propionibacterium acnes

WO200181581-A2. 01-NOV-2001. 20-APR-2001; 2001WO-US12865.

21-APR-2000; 2000US-199047P. 02-JUN-2000; 2000US-208841P. 07-JUL-2000; 2000US-216747P.

(CORI-) CORIXA CORP

Skeiky YAW,

Propionibacterium acnes immunogenic protein #7563.

27-FEB-2002 (first entry)

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The present sequence represents a synthetic peptide which has a high affinity for glycomnhoglycans and proteoglycans. The peptide is useful in methods for madulating heparin or other glycomnhoglycans with anticosquiant activity, promoting cell attachment or adhesion to natural or synthetic surfaces (especially veln grafts), modulating tumour cell metastasis, modulating cartilage differentiation, targeting drugs to epithelial cell surfaces (or to other cells expressing proteoglycans), modulating enzymes that act on glycomnhoglycan substrates, affinity purification of bloactive sequences of a plycomnhoglycan, modulating endothelial cell pro-coagulant or anti-coagulant functions mediated through glycomnhoglycans, and modulating wound healing. The peptide may also be used for blocking trissue uptake of heperin or other glycomnhoglycans; and mammal to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel synthetic peptides with high affinity for glycoaminoglycans and proteoglycans, useful for modulating heparin, promoting cell attachment, modulating tumour metastasis and modulating wound healing
                                                                                                                                                                                                                                                                                                                                                                          Glycoaminoglycan; proteoglycan; heparin modulation; anticoagulant; cell attachment; cell adhesion; vein graft; tumour cell metastasis; cartilage differentiation; wound healing.
                                                                                                                                                                                                                                                                                                                      Peptide modulating activity of heparin, and other glycans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Schick BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue uptake of heparin or other glycoami
increase heparin half-life in circulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 31; 76pp; English.
                                                                                                                                                                    AAB08179 standard; peptide; 15 AA.
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100.08; PA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYJE-) UNIV JEFFERSON THOMAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-FEB-2000; 2000WO-US02853.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 990S-0118276
                                                                                                                                                                                                                                                                       04-DEC-2000 (first entry)
                               7 AAARRARAE 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200045831-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-AUG-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                        AAB08179;
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                                                                                                                          RESULT 11
                                                                                                                                               AAB0817
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Bhatia A;

Wang SS,

Skelky YAW, Persing DH, Mitcham JL, Wang S. L'maisonneuve J, Zhang Y, Jen S, Carter D;

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Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic polypeptides. The proteins and their associated DNA sequences are used in the treatment, prevention and diagnosis of medical conditions caused by P. acnes. The disorders include SAPHO syndrone (synovitis, acne, pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis. P. acnes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acne viparties. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies appecialic for P. acnes proteins. These antibodies can be used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Propionibacterium acnes polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID No 7862; 1069pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABJ10474 standard; Protein; 262 AA.
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N-PSDB; AASS9534.
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mes 8; Conserv
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Matches
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0; Indels

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Best Local Similarity 100. Matches 8; Conservative

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AAU46667 standard; Protein; 71 AA.

AAU46667;

RESULT 12
AAU46667
ID AAU46
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AC AAU46

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The invention relates to a novel isolated CASB7439 polypeptide (I).

(I), and its related polynucleotide (II) are useful in the manufacture of a vaccine for immunotherapeutically treating a patient suffering from or susceptible to carcinoma, preferably colon cancer or other colonsassociated tumours or diseases. (I), (II), and antibody to (I) are associated tumours or diseases. (I), (II), and antibody to (I) are useful for the treatment of a subject by immunoprophylaxis or therapy by in vitro induction of immune responses to (I), preferably for the treatment of colorectal cancer. An immunogenic composition composition of or comprisition (I) is useful in medicine and for inducing an immune response against human CASB7439 polypeptide. (I) is useful as an immunogen to produce antibodies immunospecific for (I), to identify membrane bound or soluble receptors, and in a method for the structure-based design of an agonist, antagonist or inhibitor of (I). (I) or (II) can be used in a gonist, antagonist or inhibitors. (I) or (II) is useful for inducing, reconforcing or modulating an immune response in a mammal. (II) is useful as hybridisation probes for conditions. (I) or (II) is useful for inducing, reconditionating an immune response in a mammal. (II) is useful for and genomic clones encoding (I). (II) is useful for staging and denomic clones encoding (I). (II) is useful to isolate full-length conditions cancerous disorders and grading the nature of the cancerous tissue, and conformance of the concerous tissue, and and an anamal control or another or an anamal control or an anamal 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          identify clones expressing (I), to purify (I), and to prevent or treat cancer, particularly colorectal cancer, autoimmune disease and related conditions. The present sequence represents the amino acid sequence of human CASB7439 polypeptide #3 as described in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CASB7439 protein; lung cancer; NSCLC; squamous epidermoid carcinoma; SCLC; adenocarcinoma; large cell carcinoma; carcinoid; mesothelioma; cytostatic; bronchial gland tumour; human,
                                                                                                                                                                                                                                                                                                                                                                  Novel isolated CASB7439 polypeptide useful in diagnostics, and as vaccines for prophylactic and therapeutic treatment of cancers, particularly colorectal cancers, autoimmune diseases and related conditions.
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100.0%; Pred. No. 8.4
ive 0; Mismatches
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                                                                                                                                               (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 7; Page 71; 101pp; English.
                                                                                                                                                                                                     Cassart J,
                               23-FEB-2000; 2000GB-0004269.
20-APR-2000; 2000GB-0009905.
25-AUG-2000; 2000GB-0021080.
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Best Local Similarity 100.00
Best Local Similarity 100.00
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N-PSDB; AAS14990.
                                                                                                                                                                                                  Cabezon-Silva TEV,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the use of a human polynucleotide and bolypeptide comprising at least 70 % identify to a 1791 base pair sequence, and polypeptide comprising at least 70 % identify to a 1913 residue amino acid sequence, both given in the specification, for the manufacture of a medicament for breat given in the specification, for the manufacture of a medicament for breast carcinoma. The polynucleotides and polypeptides are useful as immunogens for specific prophylactic or therapeutic immunisation against the breast tumours. The polynucleotide of the invention can be used in gene breast cancer proteins of the invention.
                                                                                                         Cytostatic; gene therapy; vaccine; immunotherapeutic; breast carcinoma; cancer; immunogen; immunisation; breast tumour; CASB7439.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of CASB7439 polypeptides and polynucleotides, their variants, immunogenic fragments and fusion proteins, for the manufacture of medicaments for the prophylaxis, treatment and diagnosis of breast
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                                                      Breast cancer - CASB7439 related protein SEQ ID No 3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 70; 115pp; English.
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                                                                                                                                                                                                                                                                                                                                                            15-FEB-2002; 2002WO-EP01649
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21-NOV-2002 (first entry)
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Best Local Similarity 100..
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Seguence

AAU10338;

RESULT 14

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WO200292627-A2.
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21-NOV-2002.

07-MAY-2002; 2002WO-EP05011.

16-MAY-2001; 2001GB-0011974.

Coche T, Gaulis SRJ, Vinals De Bassols YC;

WPI; 2003-120647/11. N-PSDB; AAD51534.

Use of a CASB7439 polynuclectide or polypeptide for manufacturing a medicament for immunotherapeutically preventing or treating a patient suffering from or susceptible to preneoplastic lesions of lung cancer and lung cancer

Disclosure; Column 74-75; 55pp; English.

The invention relates to use of CASB7439 sequences for manufacturing a medicament for immunotherapeutically preventing or treating a patient suffering from or susceptible to preneoplastic lealons of lung cencer, and herbods for diagnoshing lesions. CASB7439 sequences are useful for manufacturing a medicament for treating preneoplastic lesions of lung cancer and lung cancer, such as SCLC, NSCLC (e.g. large cell (undifferentiated) carcinoma), squamnous (epidermoid) carcinoma; carcinoids, adenocarcinoma (including broncholiveolar), bronchial gland tumours or mesotheliomas. CASB7439 DNA is used in gene therapy. The present sequence is human CASB7439 protein.

262 AA; Seguence

Gaps ö 50.0%; Score 8; DB 24; Length 262; 100.0%; Pred, No. 8.4; tive 0; Mismatches 0; Indels Query Match Best Local Similarity 100. Matches 8; Conservative

2 RRAARAAA 9

134 RRAARAA 141

Search completed: August 9, 2003, 16:29:07 Job time : 46.2571 secs

(GLAX ) GLAXOSMITHKLINE BIOLOGICALS SA.

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